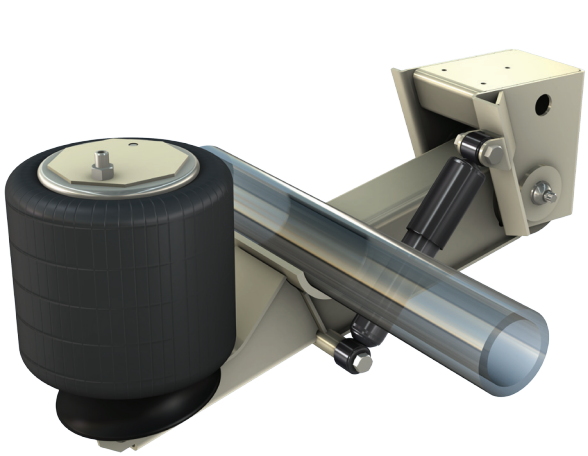
RIDEWELL SUSPENSIONS

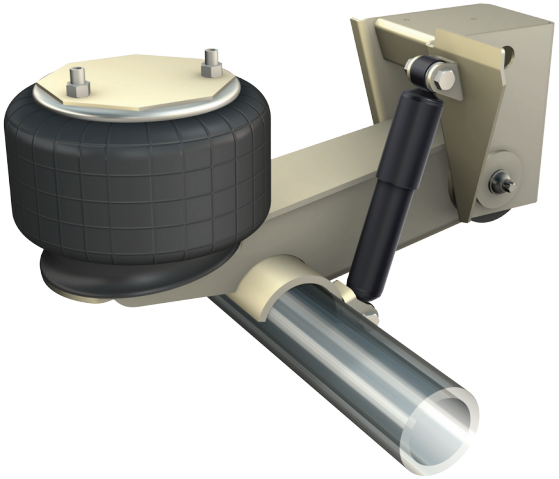
The Engineered Suspension Company

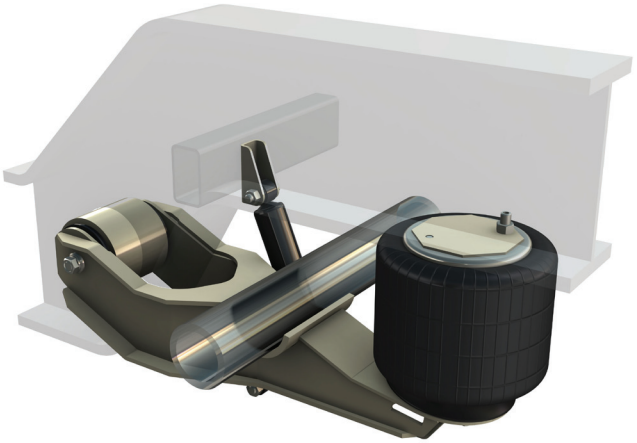
RAR-260

Trailer Air-Ride Suspensions

Owner's Manual







www.ridewellcorp.com

P.O. Box 4586 • Springfield, MO 65808 • 417.833.4565 • 417.833.4560 (fax)

0814

Suspension Identification:

Ridewell Suspensions are identified by a metal tag attached to the left-hand hanger that indicates part number, revision level, and serial number.

Parts:

For optimum suspension performance, order only Ridewell parts. Replacement parts for Model RAR-260 are shown on pages 14-17 of this manual.

Sales, Service & Warranty:

If you need assistance regarding this product, please contact us and we will be glad to help you.

Mailing Address

Ridewell Corporation
P.O. Box 4586
Springfield, MO 65808

Shipping Address

Ridewell Corporation
3715 East Farm Rd. 94
Springfield, MO 65803

Phones, Fax, E-mail

800.641.4122, 417.833.4565
417.833.4560 (fax)
info@ridewellcorp.com

Contents

Pre-Installation Notes....3
Configuration....4
Installation-General....4
Installation - Axle to Suspension....5
Installation - Suspension to Frame....5
Axle Alignment....6-7
Torque Requirements....8
Height Control System Installation....9
Bushing Check Procedure....9
Bushing Replacement Procedure....10-12
Weld Process....13
Parts Illustrations....14-17
Maintenance Schedule....18
Warranty....18

Pre-Installation Notes

1. Suspensions are designed to operate within specific parameters. Operating the suspension outside the design parameters may result in improper performance, damaged equipment and voiding of the warranty.

2. The total operating capacity of a suspension / running gear system is determined by the component with the lowest load rating. Please consult with the manufacturers of axles, brakes, tires and wheels to determine the maximum suspension system capacity.

3. The installer is responsible for ensuring that air volume requirements are met. Consult Federal Motor Vehicle Safety Standards (FMVSS) 121 for more information.

4. Welding or altering suspension components is not permitted except where explicitly stated by Ridewell Corporation.

Configuration

The Ridewell model RAR-260 suspension is designed to accommodate a range of ride heights for each specific model and can be used on a variety of axle types for various applications. The following characteristics are commonly referenced for set-up of the suspension:

1. **Ride Height (also called Mounting Height)** - The distance from the bottom of the trailer frame to the centerline of the axle. Ride height is related to frame height (the distance from the bottom of the frame to the ground) by the following formula:

   Ride Height = Frame Height - Loaded Tire Radius

   The loaded tire radius for common tire sizes can be found in **Chart 1.**

2. **Beam Centers** - The centerline-to-centerline distance from one trailing arm beam to the other. For the RAR-260, this is also the same as the centerline-to-centerline distance from one hanger to the other. The RAR-260 is designed to fit up onto standard I-beam trailer frames at beam centers that correspond to standard axle track widths as shown below with standard wheel-end equipment. Installation at wider beam centers will reduce suspension clearances; installation at narrower beam centers will de-rate the axle beam capacity per the axle manufacturer's specifications. For non-standard beam centers, frames, frame centers, axle track or wheel-end equipment, the installer is responsible for verifying clearances, axle capacity, proper fit-up, and any additional required support structure.

CHART 1
TIRE LOADED RADIUS

Tubeless	Metric	Static Loaded Radius
	215/75R17.5	14
8.5R17.5	235/75R17.5	14.5
9R17.5	225/70R19.5	15
10R17.5	245/70R19.5	15.5
	265/70R19.5	16
	285/70R19.5	16
	305/70R19.5	16.5
8R22.5	255/70R22.5	17
	245/75R22.5	17
	235/80R22.5	17
	275/70R22.5	17.5
9R22.5	265/75R22.5	18
	255/80R22.5	18
	305/70R22.5	18.5
10R22.5	295/75R22.5	19
	275/80R22.5	19
11R22.5	295/80R22.5	19.5
	315/80R22.5	19.5
	285/75R24.5	19.5
	275/80R24.5	19.5
	385/65R22.5	19.5

Standard Trailer Dimensions

Trailer Width	Axle Track	Frame Centers	Beam Centers	Air Spring Centers
96″	71.5″	38″	35″	31″
102″	77.5″	44″	41″	37″

Installation - General

1. See the applicable RAR-260 engineering drawing for all dimensional requirements, part numbers, assembly details, torque values, etc. referred to in the installation procedures.
2. The exact sequence of installation and assembly of the suspension, installation of the height control system, and completion of the axle alignment procedure is at the discretion of the trailer manufacturer.

Installation - Axle to Suspension

1. A fixture to support the axle and suspension during the welding process is recommended. Contact Ridewell engineering for applicable weld fixture number.
2. Verify the beam centers and center the axle in the axle seats.
3. For drum brake axles, space the cam off the tail of the beam per the drawing and ensure that the brake chamber brackets are oriented properly. For disc brake axles, ensure that the caliper assemblies are oriented properly and are rotated to proper position.
4. Check the gap between the axle and the bottom of the axle seat at each end of each seat. No gap greater than 1/16" allowed before clamping. After clamping the axle into the axle seats, no gap is allowed.
5. Weld the axle to the suspension trailing arms per Ridewell Weld Process #1 (see page 13).

Installation - Suspension to Frame

Note: The procedure in this section is recommended by Ridewell. Minor deviations from these guidelines are permitted, especially in the details of welding the suspension to the trailer. The installer has ultimate responsibility for attachment of the suspension to the trailer.

1. Locate and mark the proper location of the suspension hangers and air spring plates on the trailer frame. The frame must be clear in this area for proper suspension fit-up.
2. Frame cross members should be located as shown on the drawing.
3. Fabricate filler plates approximately as shown on the drawing and weld to the crossmembers with ¼" fillet welds (it is recommended to place welds down the length of the crossmember, not across it) and butt weld to frames. At the hanger, a single large filler plate in place of the two small ones may be preferable.
4. Locate and weld the hangers to the frame and filler plates with ¼" fillet welds. Stop welds approximately ½" from corners and edges. A 1.5" diameter piece of pipe may be placed through the holes in the hangers during this step as a stabilizer and aligning aide. For hangers with wing gussets, the wing gussets must be welded to a crossmember or other supporting structure.
5. Weld the air spring support plate to the frame and filler plate in similar fashion with 3/16" fillet welds.
6. Locate a crossmember or diagonal brace to the front of the hangers as shown on the drawing and attach with ¼" fillet welds.
7. All welds to be 70 ksi min. tensile strength. GMAW or FCAW recommended.
8. Assemble air springs and shock absorbers per the drawing. Ensure that no paint overspray gets under the dust cover of the shock absorbers. Overspray that gets on the piston rod of a shock will damage the seal and quickly cause the shock to leak during service.

Axle Alignment

The RAR-260 suspension is equipped with the Speed Set® alignment feature for simple, manual alignment of the axles. Depending on the suspension model, slots are provided in either the hanger sidewalls or bushing assemblies (see **Figure 1a**) which allow 0.5" of adjustment at each pivot connection.

1. Prior to alignment, position the suspension beams so that the pivot bolts are centered in the alignment slots. See **Figure 1a**.
2. Align the forward axle to the center of the kingpin to within ± 1/8". See **Figure 2**.
3. Alignment procedure:
   a. Loosen the pivot nut.
   b. Move beam in the direction of desired axle movement. Use a 1/2" shank breaker bar inserted into the square hole in the adjuster plate. See **Figure 1b.** Ensure that both inboard alignment washer and outboard adjuster plate have moved in unison. It is important that the bushing is not skewed in the hanger prior to tightening.
   c. Snug the pivot fasteners and re-check alignment measurements. Adjust if necessary.
   d. Torque the pivot bolt using a 1" drive impact wrench and #6100054 E-20 Torx socket (or equivalent) until the Torx head shears off from the bolt.

   Note: Torque the pivot bolt with the suspension at ride height to prevent pre-stressing the rubber pivot bushing.

   Note: It is imperative that the pivot fasteners be properly torqued prior to placing the trailer into service. Failure to torque the pivot fasteners will lead to slippage of the pivot joint, causing rapid wear of the components and ultimately leading to catastrophic failure of the suspension. Warranty coverage of the suspension is void if the pivot fasteners are not properly torqued.

   e. Welding alignment washers to the hanger sidewalls of hanger mount suspensions is not required or recommended.
4. Align the aft axle(s) to the forward axle to within ± 1/16" using the same procedure. See **Figure 2.**
5. In general, small alignment changes can be made on one side (left beam or right beam). It is preferable that large alignment changes be made by splitting the difference from one side to the other (i.e. 1/2 the difference forward at one beam, 1/2 the difference aft at the other beam).

Figure 1a

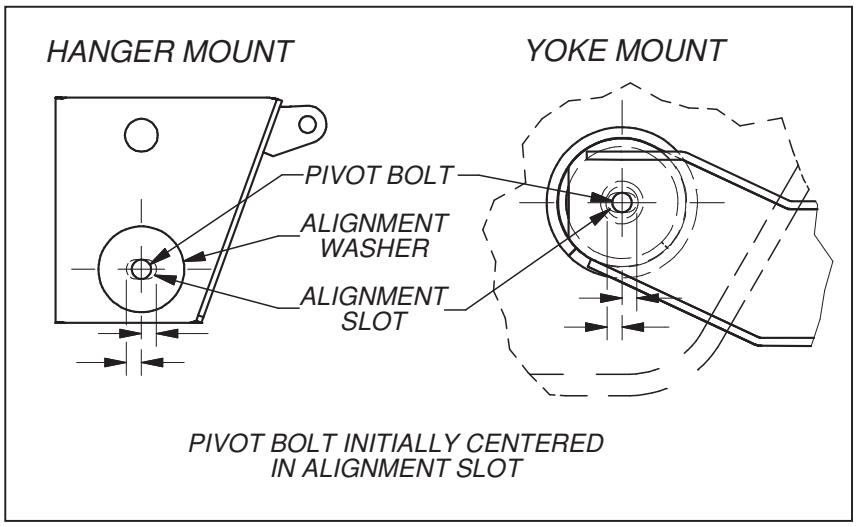
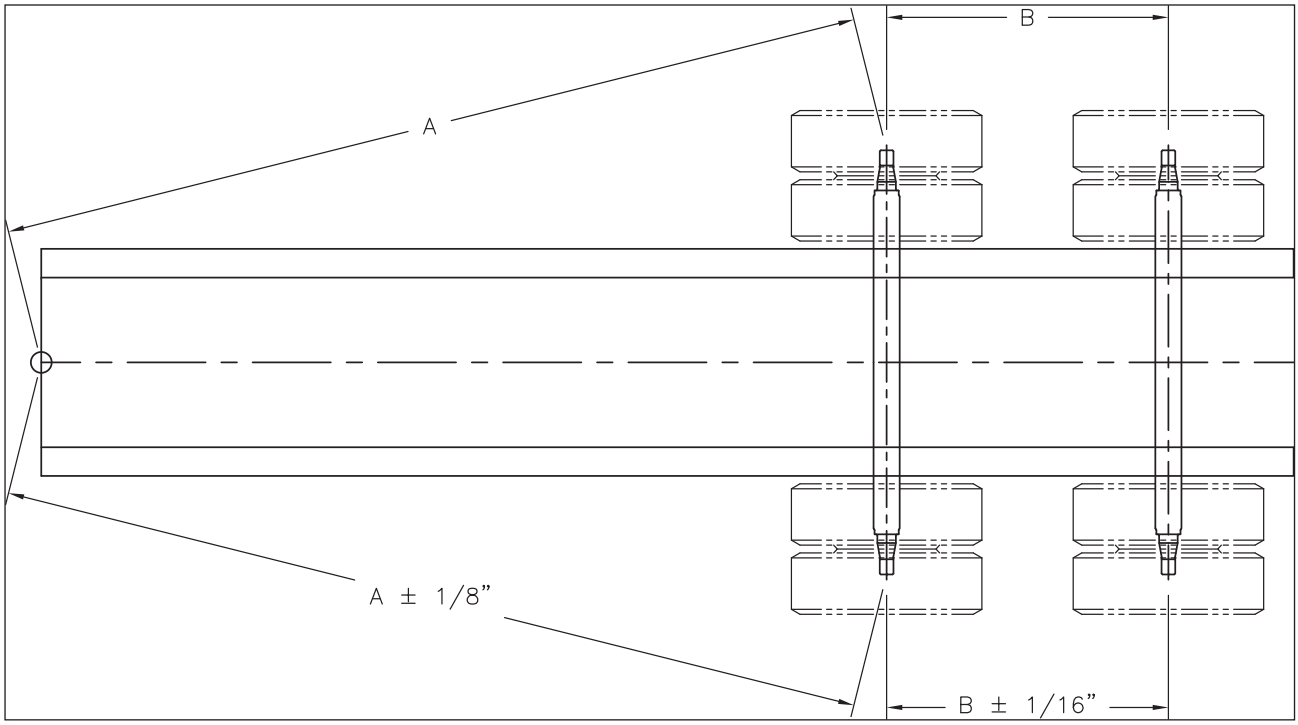


Figure 1b

Figure 2



Torque Requirements

Design torque on all suspension fasteners must be SET AND MAINTAINED BY INSTALLER.

NOTICE!

* Suspension fasteners ARE NOT at design torque.
* Suspension installer must tighten all fasteners to design torque at the time of installation.
* Refer to the suspension drawing and/or the torque chart on this tag for further details.

Figure 3

RAR-260

#1990033

RIDEWELL SUSPENSION TORQUE CHART

ITEM	SIZE	TORQUE (FT-LB)	TORQUE (N·m)
Pivot Bolt/Nut	7/8" - 9NC	SEE BELOW	SEE BELOW
Shock Bolt/Nut	3/4" - 10NC	200 - 230	271 - 312
Air Spring Nut, Upper	3/4" - 16NF	45 - 50	61 - 68
Air Spring Nut, Lower	1/2" - 13NC	45 - 50	61 - 68
Air Spring Bolt, Lower	1/2" - 13NC	25 - 30	34 - 41

Torque pivot bolt using a 1" drive impact wrench and #6100054 E-20 Torx socket (or equivalent) until the Torx head shears off from the bolt.

Suspension fasteners to be retorqued initially at 6,000 miles (10,000 KM) and 50,000 miles (80,000 KM) increments thereafter. Do not retorque pi vot fasteners.

This torque label, included in the carton of parts, should be adhered to the chassis above the suspension.

#1990032

RIDEWELL SUSPENSIONS

RAR-260

ITEM	SIZE	TORQUE	
Pivot Bolt/Nut	7/8" - 9NC	SEE BELOW	SEE BELOW
Shock Bolt/Nut	3/4" - 10NC	200 - 230 ft-lb	271 - 312 N·m
Air Spring Nut, Upper	3/4" - 16NF	45 - 50 ft-lb	61 - 68 N·m
Air Spring Nut, Lower	1/2" - 13NC	45 - 50 ft-lb	61 - 68 N·m
Air Spring Bolt, Lower	1/2" - 13NC	25 - 30 ft-lb	34 - 41 N·m

Torque pivot bolt using a 1" drive impact wrench and #6100054 E-20 Torx socket (or equivalent) until the Torx head shears off from the bolt.

Suspension fasteners to be retorqued initially at 6,000 miles (10,000 KM) and 50,000 miles (80,000 KM) increments thereafter. **Do not retorque pivot fasteners.**

See service manual for details or call (800) 641-4122
Ridewell Corporation, Springfield, MO USA www.ridewellcorp.com

Height Control System Installation

Install the appropriate height control valve, linkages, etc. per the Extreme Air™ Height Control Valve Installation and Operations Guide for model RAR-260.

Bushing Check Procedure

The bushings in the RAR-260 suspension should be checked during any scheduled maintenance or any time there is a suspected problem. Bushing problems can arise from breakdown of the natural rubber over time or, in a severe application, by failure of the bond between the rubber and the metal inner sleeve. The bushings should be checked if any of the following conditions are observed:

1. Uneven tire wear.
2. Abnormal forward-aft or lateral movement of the axle during operation.
3. Rapid degradation of wear washers.
4. Abnormal noises coming from the suspension.

To check, insert the flat end of a pry-bar between the sidewall of the hanger and the eye of the beam. Applying moderate side load to the pry-bar, look for any relatively large or easy movement of the beam in relation to the hanger. Note that a small amount of movement under load due to deflection of the rubber is normal and acceptable. Repeat the process on the other side of the hanger. If large or easy movement is noted, drop the beams down per the bushing replacement procedure for further inspection of the bushing and replace if necessary.

Bushing Replacement Procedure

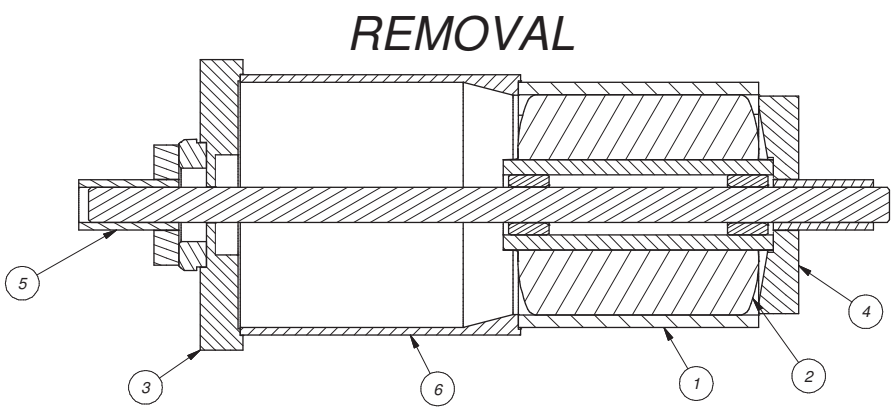
RAR-260 Underslung or Overslung Suspension

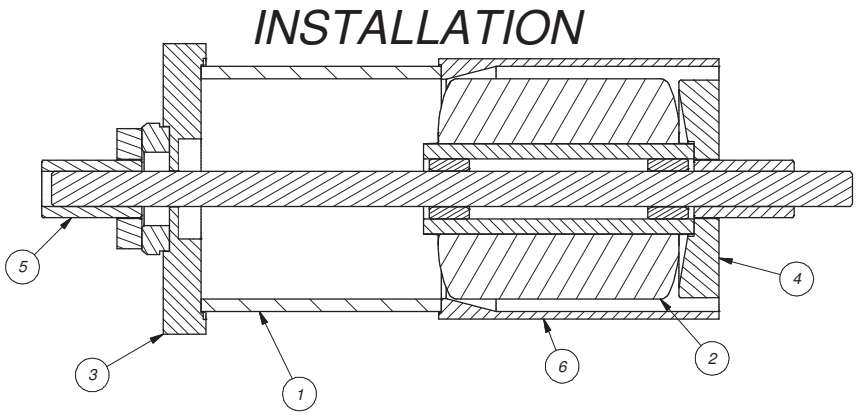
Order RAR-260 bushing replacement kit number 6040098. The following describes bushing removal and installation using tool number 6100051.

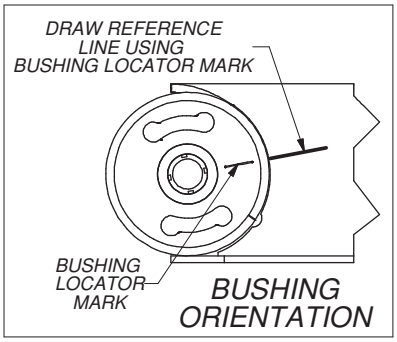
1. Raise and safely block up trailer and axle. Remove wheels and tires. Remove shock absorbers from suspension.
2. Deflate air springs and, if necessary, disconnect air control valve linkage.
3. Remove pivot nuts and bolts.
4. Rotate trailing arm beams down and out of hangers.
5. Inspect pivot holes and hanger surfaces for unusual wear or damage. Repair or replace components as required.
6. Using the locator mark on the bushing as reference, draw a line on the beam. See "Bushing Orientation" portion of **Figure 4**. This will be used to orient the new bushing when installed.
7. Lubricate the threads and bearings of the bushing installation tool with grease.
8. Assemble the bushing installation tool to the bushing and beams as shown in the "Removal" portion of **Figure 4** and ensure that the tool is squarely seated on the beam eye. Rotate the hex nut of the threaded rod with an impact wrench to press out the old bushing. A small amount of heat should be applied to the beam eye to break the bushing loose. Use of a ¾" drive impact is recommended.
9. Disassemble the bushing installation tool.
10. Clean the bushing eye of corrosion and debris.
11. Apply Seagull Type "M" lubricant to the new bushing outer diameter, inside the beam eye and inside the cone. This lubricant is included in the bushing replacement kit; do not substitute.
12. Reassemble the bushing installation tool as shown in the "Installation" portion of **Figure 4** and ensure that the tool is squarely seated on the beam eye. Align the locator mark on the new bushing with the reference line drawn on the beam. Install the new bushing by rotating the hex nut of the threaded rod with an impact wrench; prevent the plunger assembly from rotating by holding its hex nut with an open end wrench.
13. Remove the bushing installation tool and ensure that the bushing is centered in the beam eye.
14. Re-assemble beams to hangers with new UHMW polyethylene wear washers and pivot sizing washers.
15. Align bushing sleeves to hanger alignment slots and install new pivot bolts, washers and nuts. **DO NOT REUSE SHEAR-TYPE PIVOT BOLTS.**

16. Align axle and torque pivot bolts per the "Axle Alignment Procedure."
17. Re-install shock absorbers.
18. Re-install wheels and tires.
19. If necessary, re-connect air control valve linkage and adjust ride height per the Extreme Air™ Height Control Valve and Operations Guide.

Figure 4







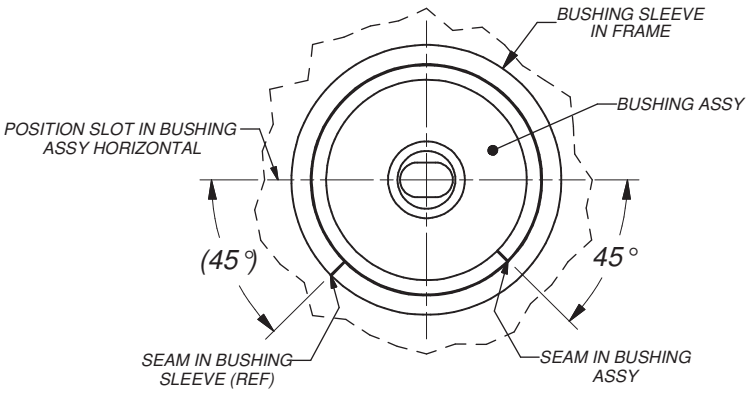
6100051 BUSHING INSTALLTION TOOL PARTS LIST			
ITEM	PART NO.	DESCRIPTION	QTY
1	--------	BEAM BUSHING EYE	-
2	1110084	BUSH CAVITY TENNECO MB96B914260	-
3	5340038	END CAP ASSY.	1
4	5340039	PLUNGER ASSEMBLY	1
5	5360003	NUT,ALLTHREAD ASSY	1
6	6100053	CONE, TOOL	1

* ITEM SHOWN FOR REFERENCE ONLY NOT INCLUDED WITH BUSHING INSTALLATION TOOL 6100051

Bushing Replacement Procedure

RAR-260 Yoke Suspension

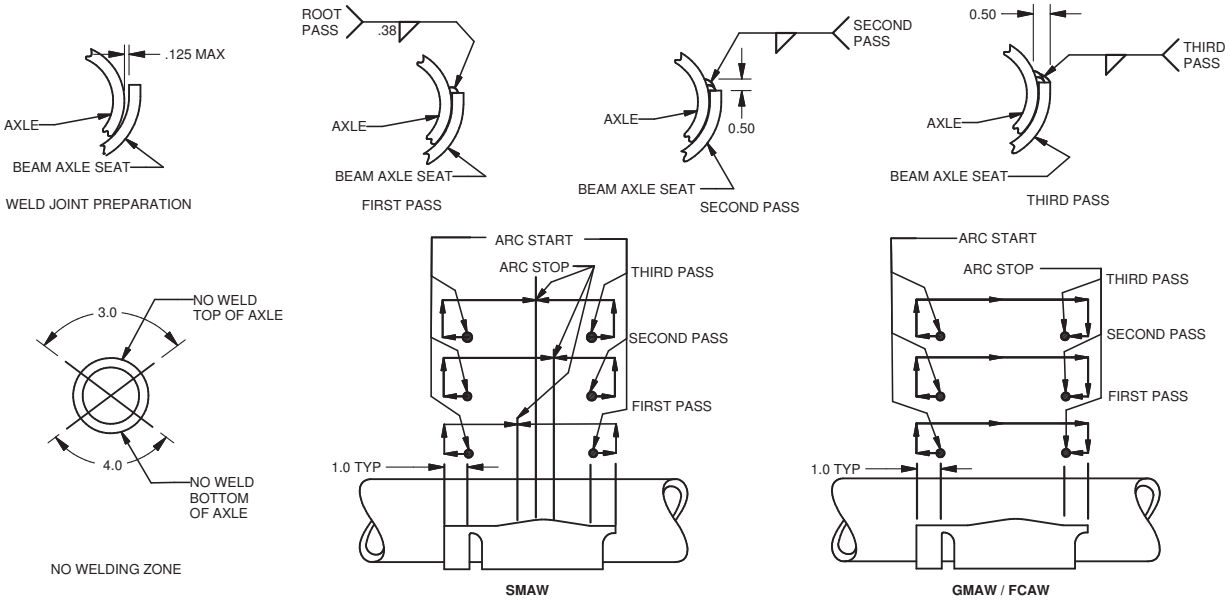
1. Raise and safely block up trailer and axle. Remove wheels and tires. Remove shock absorbers from suspension.
2. Deflate air springs and, if necessary, disconnect air control valve linkage.
3. Remove pivot nuts and bolts.
4. Rotate trailing arm beams down and away from trailer frames.
5. Inspect trailing arm pivot holes and bushing sleeve surfaces for unusual wear or damage. Repair or replace components as required.
6. Remove bushing assembly from bushing sleeve by grinding away the four welds on each end.
7. Install and center new bushing assembly into each bushing sleeve in frame. Position slot and seam per **Figure 5**. Weld one inch long at four places, both sides, equally spaced. Allow steel to cool between welds, to prevent damaging the bond between the rubber bushing and steel sleeve. Also, stagger welds to prevent heat build-up and distortion by welding top of sleeve at outboard side of frame, then bottom of sleeve at inboard side of frame, and moving around the sleeve in 90º increments.
8. Re-assemble beams to frames with new UHMW polyethylene wear washers placed on both inboard and outboard sides of the bushing assembly.
9. Align beam pivot holes to bushing alignment slots and install new pivot bolts and nuts. **DO NOT REUSE SHEAR-TYPE PIVOT BOLTS.**
10. Align axle and torque pivot bolts per the "Axle Alignment Procedure."
11. Re-install shock absorbers.
12. Re-install wheels and tires.
13. If necessary, re-connect air control valve linkage and adjust ride height per the Extreme Air™ Height Control Valve and Operations Guide.



YOKE SUSPENSION BUSHING ASSY ORIENTATION

Figure 5

Weld Process #1



REPRESENTATIVE AXLE SEAT (PROFILE DEPENDENT ON SUSPENSION PRODUCT)

1 - WELD JOINT PREPARATION: ALL GREASE, DIRT, PAINT, SLAG OR OTHER CONTAMINANTS MUST BE REMOVED FROM THE WELD JOINT WITHOUT GOUGING THE AXLE TUBE. INSURE THE LOWER BEAM ASSEMBLY FITS THE AXLE WITH A ROOT GAP OF 0.125 INCH MAXIMUM BETWEEN THE AXLE AND THE BEAM AXLE SEAT AS ILLUSTRATED ABOVE. IT IS RECOMMENDED TO C-CLAMP THE AXLE TO AXLE BEAM SEAT PRIOR TO WELDING TO INSURE THAT PROPER CONTACT OCCURS BETWEEN THE AXLE AND THE BEAM SEAT. SEE ILLUSTRATION BELOW.

2 - WELDING PRECAUTIONS: ALL WELDS MUST BE KEPT AWAY FROM THE TOP AND BOTTOM OF THE AXLE WHERE MAXIMUM STRESSES OCCUR. THE "NO WELD" ZONES ARE ILLUSTRATED ABOVE. DO NOT TEST WELD THE ARC ON ANY PART OF THE AXLE TUBE. THIS CAN LEAD TO A SMALL CRACK THAT MAY EVENTUALLY GROW AND AFFECT THE FATIGUE LIFE OF THE AXLE.

3 - ALL WELDERS AND WELDING OPERATORS SHOULD BE CERTIFIED PER AMERICAN WELDING SOCIETY (AWS) D1.1 SECTION 5 PROCEDURES OR EQUAL.

4 - RECOMMENDED WELDING METHODS ARE SHIELDED METAL ARC (SMAW (STICK)), GAS METAL ARC (GMAW (SOLID WIRE)), OR FLUX CORED ARC (FCAW (FLUX WIRE)) WELDING. WHATEVER ELECTRODE AND METHOD USED MUST DEVELOP A MINIMIMUM WELD TENSILE STRENGTH OF 70,000 P.S.I. REFER TO THE ELECTRODE MANUFACTURER'S RECOMMENDATION FOR VOLTAGE, CURRENT AND SHIELDING MEDIUM FOR THE DIAMETER ELECTRODE TO BE USED SO THE BEST FUSION AND MECHANICAL PROPERTIES CAN BE OBTAINED. RECOMMENDED ELECTRODE IS E7018 IF SMAW IS USED. RECOMMENDED ELECTRODE IS E70S-1 OR E70T-1 IF GMAW OR FCAW WELDING IS USED.

5 - ALL ELECTRODES USED SHOULD MEET AWS SECTION 5 SPECIFICATIONS AND CLASSIFICATIONS FOR WELDING CARBON AND LOW ALLOY STEELS.

6 - IF SMAW ELECTRODES (STICK) ARE USED, THEY MUST BE NEW, DRY, FREE OF CONTAMINANTS AND COME FROM A STOCK THAT HAS BEEN PURCHASED AND STORED PER AWS SECTION 4.5.2, LOW HYDROGEN ELECTRODE STORAGE SPECIFICATIONS.

7 - GROUND THE AXLE TO ONE OF THE ATTACHED AXLE PARTS SUCH AS THE AIR CHAMBER BRACKETS, CAM BRACKETS OR BRAKE SPIDER. NEVER GROUND THE AXLE TO A WHEEL OR HUB AS THE SPINDLE BEARING MAY SUSTAIN DAMAGE.

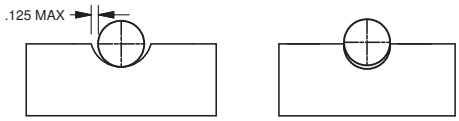
8 - THE AXLE ASSEMBLY SHOULD BE AT A MINIMUM TEMPERATURE OF 60 DEGREES F (15 DEGREES C) PRIOR TO WELDING. PRE-HEATING THE WELD ZONE TO THE AXLE MANUFACTURER'S PRE-HEAT TEMPERATURE IS RECOMMENDED. THIS WILL MINIMIZE THE FORMATION OF MARTENSITIC OR BRITTLE METAL STRUCTURES IN THE FUSION LINE OR THE HEAT AFFECTED ZONE WHICH MAY CONTRIBUTE TO A PREMATURE FATIGUE FAILURE IN SERVICE.

9 - THE JOINT TO BE WELDED SHOULD BE POSITIONED IN THE FLAT OR HORIZONTAL POSITION.

10 - MULTIPLE PASS WELDING SHOULD BE USED ON THE BEAM/AXLE CONNECTION USING THE FOLLOWING GUIDELINES. TOTAL FILLET WELD SIZE SHOULD BE 0.5 INCH.

11 - MULTIPLE PASS WELD INITIATION AND TERMINATION SHOULD BE PERFORMED AS SHOWN ABOVE. ALL SLAG MUST BE REMOVED BETWEEN PASSES. BACKSTEP FILL ALL CRATERS. EACH PASS MUST BE ACCOMPLISHED IN ONE OR TWO SEGMENTS. NEVER START OR STOP WELDS AT THE END OF THE WELD JOINT. START WELDS AT LEAST 1" FROM END AND BACKWELD OVER THE START. WELDS MUST GO TO WITHIN 1/8" +/- 1/16" OF THE ENDS OF THE AXLE SEAT AND MUST NOT GO BEYOND OR AROUND THE ENDS.

12 - POST-WELD PEENING (RECOMMENDED, BUT NOT REQUIRED): NEEDLE PEEN THE ENTIRE TOE OF THE SECOND PASS, INCLUDING AROUND THE ENDS OF THE AXLE SEAT. HOLD THE NEEDLES PERPENDICULAR TO THE AXLE. A UNIFORM DIMPLED PATTERN WILL APPEAR WHEN PROPERLY PEENED.



CORRECT INCORRECT

APPLICABLE SUSPENSION MODELS: 200, 225, 240, 245R, 215, 243, 260.

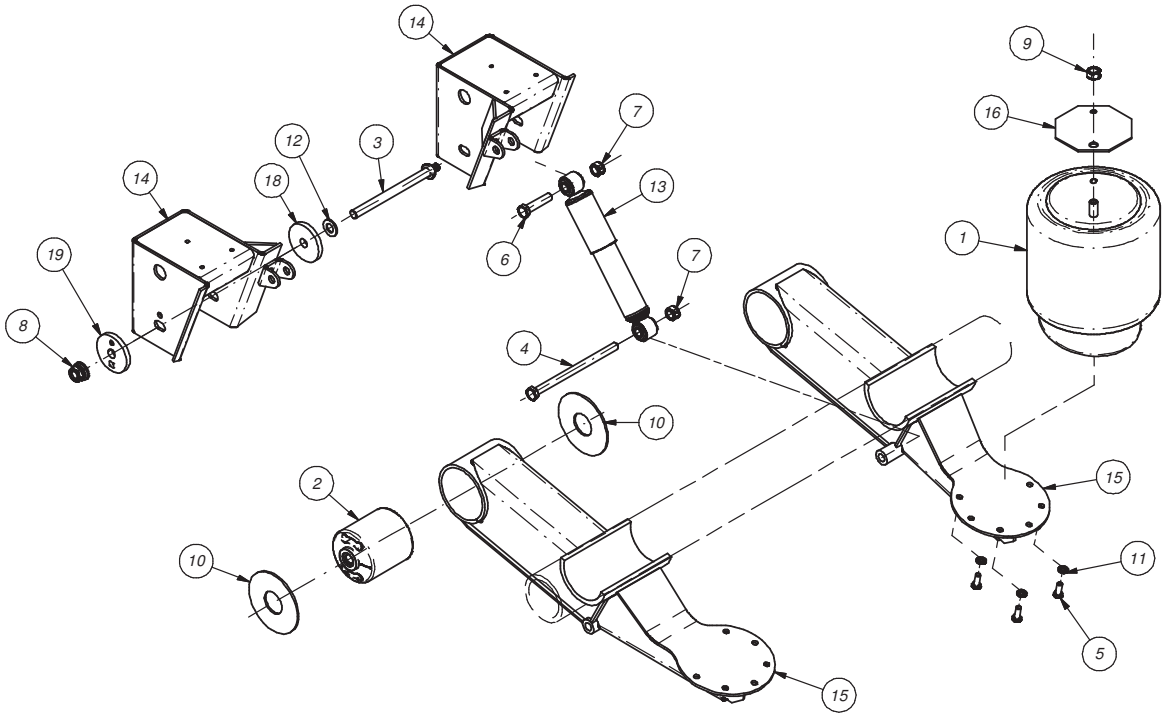
REV	PROJECT	DESCRIPTION	DATE	BY	CHK	APPD
C	10102	REVISED WELD DIMENSIONS.	6/25/10	G.H.	MDJ	CJB
B	10102	REVISED NOTES 11 AND 12.	2/3/10	G.H.	MDJ	CJB
A	07100	ADDED 215 TO LIST OF SUSPENSION MODELS COVERED	2/26/07	G.H.	MDJ	DK

DRAWN BY: CBC	6/23/2010	RIDEWELL CORPORATION
CHECKED: MDJ	2/21/2003	PO BOX 4586 SPRINGFIELD, MISSOURI 65808
APPROVED: CJB	2/21/2003	
PROJECT NO: 03103	SCALE: A-SIZE: NTS	TITLE: RIDEWELL WELD PROCESS #1, 5" DIA. AXLE, 3 PASS WELD
MATERIAL: -	WEIGHT: -	
		SHEET 1 OF 1
		PART NO: WELD PROCESS #1
		REV: C

Parts Illustrations

Figure 6

RAR-260 UNDERSLUNG SUSPENSION
25,000 LB & 30,000 LB CAPACITY



	ITEM	PART NO.	DESCRIPTION
	1	SEE DRAWING	AIR SPRING
*	2	1110084	BUSH CAVITY TENNECO MB96B914260
*	3	1130031	PIVOT BOLT, SHEAR-TYPE 7/8" 9NC 10"LG
	4	1140022	HHCS 3/4" 10NC 11"LG GR 8
	5	1145383B105	HHCS 1/2" 13NC 1-1/4"LG GR 5
	6	1147698B105	HHCS 3/4" 10NC 3-1/4"LG GR 5
	7	1150023	L'NUT 3/4"-10NC CENTER LOCK GR-B
*	8	1150032	L'NUT 7/8" 9NC GR8 SECURELOK
	9	1150558B102	NUT 3/4" 16NF GRD 2
*	10	1160021	WEAR WASHER UHMW-PE
	11	1160556B100	L'WASHER 1/2" S/T MED
*	12	1160868B100	WASHER 7/8" A-325 FLAT
	13	1270563B003	SHOCK ASSY 6" MONROE
	14	SEE DRAWING	HANGER ASSY
	15	SEE DRAWING	BEAM ASSY
	16	SEE DRAWING	A/SPG PLATE
*	17	-	NOT USED
	18	7002249	ALIGNMENT WASHER
	19	7002686	ADJUSTER PLATE 4.0"OD

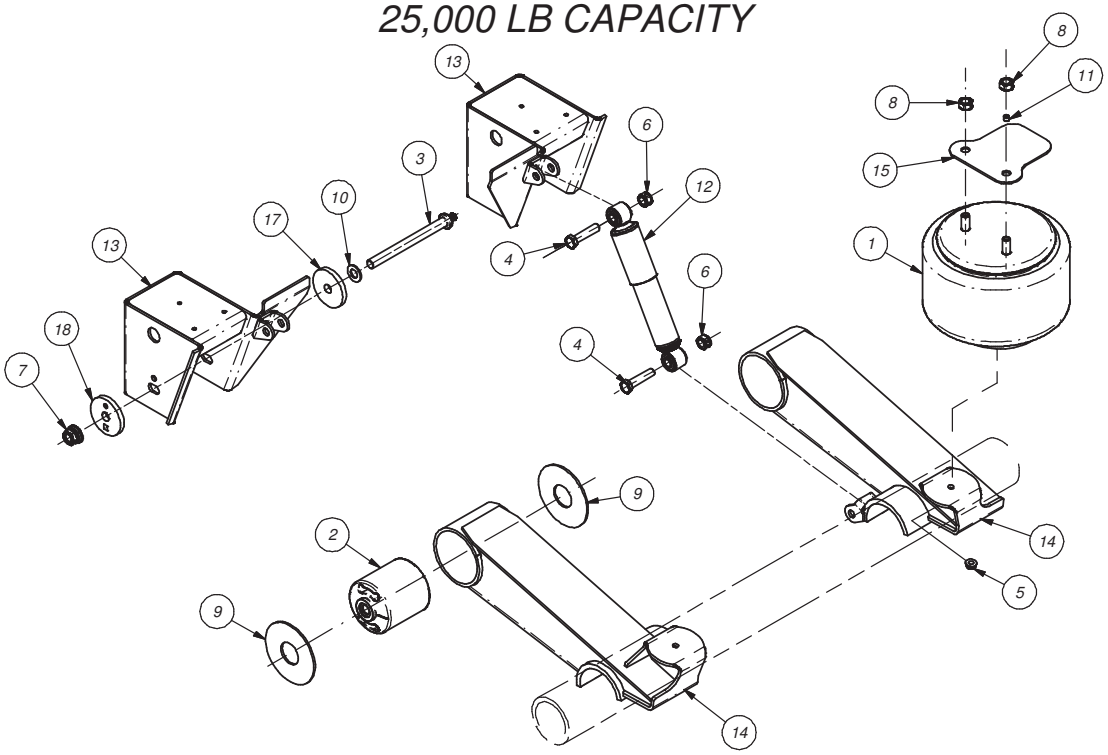
NOTES:

*1 - ITEMS INDICATED WITH * ARE INCLUDED IN BUSHING REPLACEMENT KIT NO. 6040098. ORDER 1 KIT PER AXLE.*

2 - FOR PART NUMBERS NOT SPECIFIED PLEASE SEE APPLICABLE ENGINEERING DRAWING OR CONTACT RIDEWELL FOR ASSISTANCE.

Figure 7

RAR-260 OVERSLUNG SUSPENSION 25,000 LB CAPACITY



	ITEM	PART NO.	DESCRIPTION
	1	SEE DRAWING	AIR SPRING
*	2	1110084	BUSH CAVITY TENNECO MB96B914260
*	3	1130031	PIVOT BOLT,SHEAR-TYPE 7/8" 9NC 10"LG
	4	1147698B105	HHCS 3/4" 10NC 3-1/4"LG GR 5
	5	1150012	L'NUT 1/2" 13NC FLANGED T-L GR 8
	6	1150023	L'NUT 3/4"-10NC CENTER LOCK GR-B
*	7	1150032	L'NUT 7/8" 9NC GR8 SECURELOK
	8	1150558B102	NUT 3/4" 16NF GRD 2
*	9	1160021	WEAR WASHER UHMW-PE
*	10	1160868B100	WASHER 7/8" A-325 FLAT
	11	1230059	PIPE PLUG, 1/4" MNPT, HEX SOCKET
	12	1270563B003	SHOCK ASSY 6" MONROE
	13	SEE DRAWING	HANGER ASSY
	14	SEE DRAWING	BEAM ASSY
	15	7000894	AIR SPRING MOUNTING PLATE
*	16	-	NOT USED
	17	7002249	ALIGNMENT WASHER
	18	7002686	ADJUSTER PLATE 4.0"OD

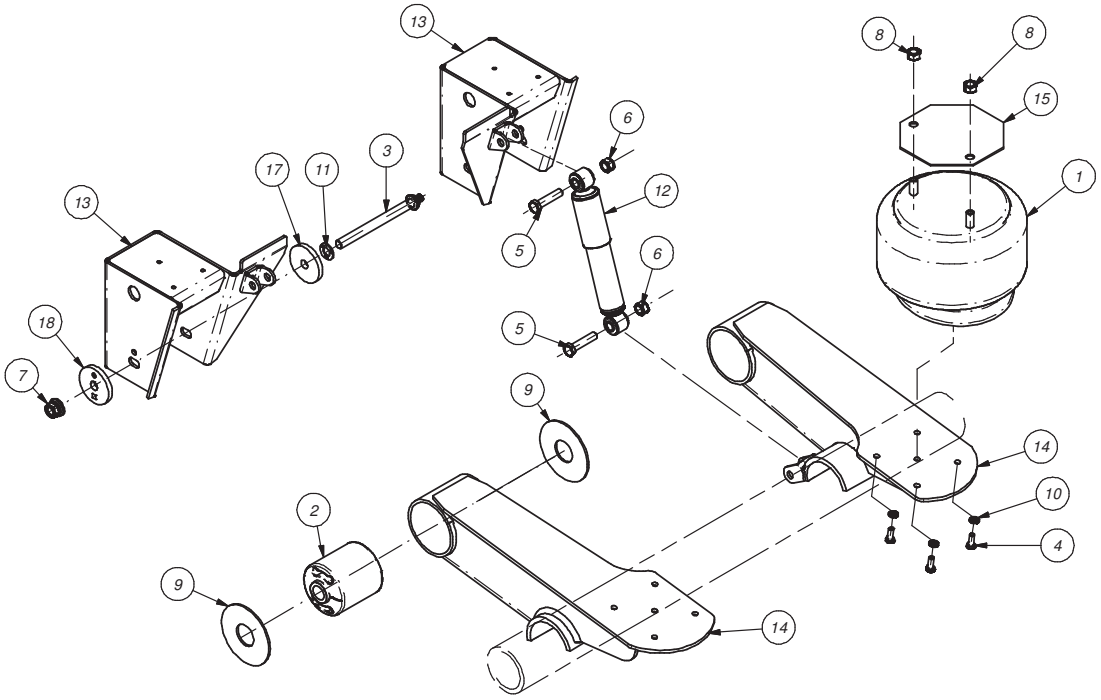
NOTES:

1 - ITEMS INDICATED WITH * ARE INCLUDED IN BUSHING REPLACEMENT KIT NO. 6040098. ORDER 1 KIT PER AXLE.

2 - FOR PART NUMBERS NOT SPECIFIED PLEASE SEE APPLICABLE ENGINEERING DRAWING OR CONTACT RIDEWELL FOR ASSISTANCE.

Figure 8

RAR-260 OVERSLUNG SUSPENSION
30,000 LB CAPACITY



	ITEM	PART NO.	DESCRIPTION
	1	SEE DRAWING	AIR SPRING
*	2	1110084	BUSH CAVITY TENNECO MB96B914260
*	3	1130031	PIVOT BOLT, SHEAR-TYPE 7/8" 9NC 10"LG
	4	1145383B105	HHCS 1/2" 13NC 1-1/4"LG GR 5
	5	1147698B105	HHCS 3/4" 10NC 3-1/4"LG GR 5
	6	1150023	L'NUT 3/4"-10NC CENTER LOCK GR-B
*	7	1150032	L'NUT 7/8" 9NC GR8 SECURELOK
	8	1150558B102	NUT 3/4" 16NF GRD 2
*	9	1160021	WEAR WASHER UHMW-PE
	10	1160556B100	L'WASHER 1/2" S/T MED
*	11	1160868B100	WASHER 7/8" A-325 FLAT
	12	1270563B003	SHOCK ASSY 6" MONROE
	13	SEE DRAWING	HANGER ASSY
	14	SEE DRAWING	BEAM ASSY
	15	7000004	AIR SPRING PLATE 10" OCT 7.75"
*	16	-	NOT USED
	17	7002249	ALIGNMENT WASHER
	18	7002686	ADJUSTER PLATE 4.0"OD

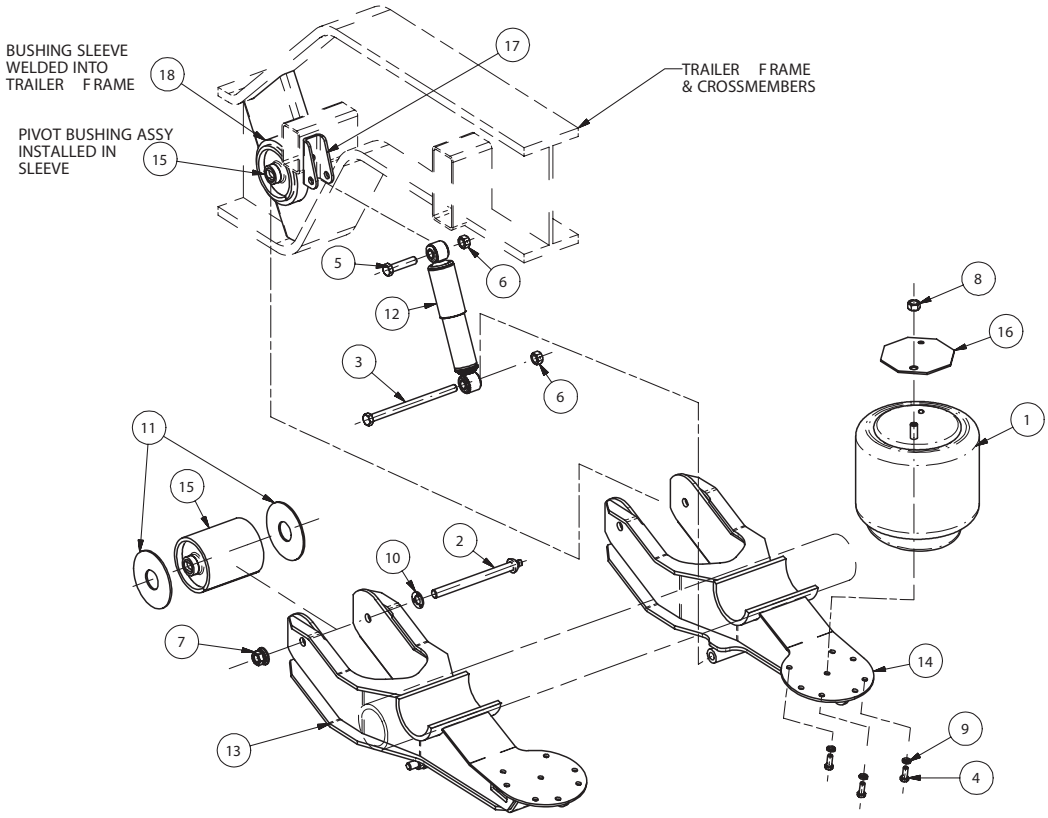
NOTES:

1 - ITEMS INDICATED WITH * ARE INCLUDED IN BUSHING REPLACEMENT KIT NO. 6040098. ORDER 1 KIT PER AXLE.

2 - FOR PART NUMBERS NOT SPECIFIED PLEASE SEE APPLICABLE ENGINEERING DRAWING OR CONTACT RIDEWELL FOR ASSISTANCE.

Figure 9

RAR- 260 YOKE SUSPENSION
25,000 LB CAPACITY



	ITEM	PART NO .	DESCRIPTION
	1	SEE DRAWING	AIR SPRING
*	2	1130031	PIVOT BOLT , SHEAR-TYPE 7/8" 9NC 10" LG
	3	1140022	HHCS 3/4" 10NC 11" LG GR 8
	4	1145383 B105	HHCS 1/2" 13NC 1-1/4" LG GR 5
	5	1147698 B105	HHCS 3/4" 10NC 3-1/4" LG GR 5
	6	1150023	L'NUT 3/4"-10NC CENTER LOCK GR-B
*	7	1150032	L'NUT 7/8" 9NC GR 8 SECURELOK
	8	1150558 B102	NUT 3/4" 16NF GRD 2
	9	1160556 B100	L'WASHER 1/2" S/T MED
*	10	1160868 B100	WASHER 7/8" A-325 F LAT
*	11	1167680 B000	WEAR WASHER UHMW-PE
	12	1270563 B003	SHOCK ASSY 6" MONROE
	13	4280266	BEAM ASSEMBLY , LH
	14	4280267	BEAM ASSEMBLY , RH
*	15	5450021	BUSHING ASSY BONDED YOKE 260
	16	7001723 B000	AIR SPRING PLATE
	17	8147716 B000	SHOCK MOUNT
	18	8990027	SLEEVE BUSH OUTER YOKE 260

NOTES:

1 - ITEMS INDICATED WITH * ARE INCLUDED IN BUSHING REPLACEMENT KIT NO . 6040099. ORDER 1 KIT PER AXLE .

2 - FOR PART NUMBERS NOT SPECIFIED PLEASE SEE APPLICABLE ENGINEERING DRAWING OR CONTACT RIDEWELL FOR ASSISTANCE .

Maintenance Schedule

To keep your Ridewell suspension in optimum working order, we recommend following maintenance.

	Every 1,000 miles	First 6,000 miles of operation	Every 12,000 miles	Every 50,000 miles
Bushings				I
Air Springs	I			
Structure	I			
Ride Height	I			
Fastener Torque		T		T

I - Inspect, L = Lubricate, T = Tighten, R = Replace

Warranty

This warranty applies for usage within the USA. For usage outside the USA, please contact Ridewell.

The Ridewell Corporation warrants the suspension systems manufactured by it to be free from defects in material and workmanship, under proper use, installation, application, and maintenance on highway trailers for a period of 5 years with no mileage limit, after delivery to the original purchaser. The responsibility of the Ridewell Corporation under this non-transferable warranty is limited to making good at the company factory by repair or replacement of any part or parts which it manufactures.

Written permission for any claim return must be first obtained from authorized Ridewell personnel. All returns must have transportation charges prepaid by the customer and accompanied with a complete written explanation of claimed defects and the circumstances of operational failure. On all component parts not manufactured by Ridewell their warranty is to the extent that the manufacturer of such parts warrant them to Ridewell Corporation. This is the only authorized Ridewell warranty and is in lieu of all other expressed or implied warranties or representations, including any implied warranties of merchantability or fitness, or of any obligations on the part of Ridewell Corporation. In no event will Ridewell be liable for business interruptions, loss of profits, personal injury, cost of delay, or for any other special, indirect, incidental or consequential losses, costs or damages.

Subject to all of the above conditions, if repair or replacement of any defective part is made by Ridewell Corporation, Ridewell will return the repaired or replaced part to the original purchaser with transportation charges prepaid.

Years 1-3	100% Parts & labor
Years 4-5	100% Parts (pivot bushing excluded)